

## Department of Energy Office of Science

Office of Science
Washington, DC 20585

December 1, 2005

Office of the Director

Dr. Keith O. Hodgson Director, Stanford Synchrotron Radiation Laboratory Department of Chemistry Stanford University Stanford, CA 94305

Dear Dr. Hodgson:

In December 2004, the Biological and Environmental Research Advisory Committee (BERAC) issued a report on the potential scientific impacts of the proposed Facility for the Production and Characterization of Proteins and Molecular Tags (GTL-1). In October 2005, BERAC issued a Report on Planning and Development of the GTL-1 Facility and Further Consideration of GTL Facilities 2, 3, and 4. These reports have been valuable in clarifying the value of these facilities to the scientific community and the GTL research program especially in terms of the broad capabilities needed by the GTL program.

While plans for the design and development of GTL-1 are well underway, we are still at a very early stage in the planning of the next three GTL facilities. The FY 2006 conference report for BER stated that "the conferees support the development of the proposed Genomes to Life (GTL) facilities, and encourage the Department to budget for the first of these GTL facilities, for the production and characterization of proteins and molecular tags, in fiscal year 2007. The conferees encourage the Department to reduce the cost of the GTL facilities to accelerate deployment of all four proposed GTL centers. Due to the nature of this research, there is a need for all of the facilities to be deployed to meet the scientific challenge of molecular characterization. The conferees recommend that the Department conduct an open competition for the siting of these GTL facilities."

Given this support and guidance from Congress, I am asking BERAC to expand on its October 2005 report by revisiting and recommending options that we should consider to facilitate the development of GTL Facilities 2, 3 and 4 in a more cost effective and parallel manner. I ask you to reconsider a variety of options that have previously been discussed including, but not limited to, three individual facilities, a larger number of distributed facilities and some combination of integrated facilities. In addition, I need your advice on the difficult issue of cost by providing advice on the minimum capacity needed by each facility for it to have a substantial impact on the GTL research program

well beyond the impact of individual or groups of research projects. Finally, it should be noted that the Office of Management and Budget would also like BER to consider alternatives to the current version of the facilities.

I look forward to receiving your report after the first meeting of BERAC in 2006.

Sincerely,

Raymond L. Orbach

Director